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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/759,154

01/20/2004

Grant L. Hutchison

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EDELL, SHAPIRO, & FINNAN, LLC

1901 RESEARCH BOULEVARD, SUITE 400

ROCKVILLE, MD 20850

EXAMINER

BLACK, LINH

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/759,154	<b>Applicant(s)</b> HUTCHISON ET AL.	
	<b>Examiner</b> LINH BLACK	<b>Art Unit</b> 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2/1/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-10,12-16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-10,12-16 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

This communication is responsive to the RCE dated 2/1/08. Claims 1-4, 6-10, 12-16 and 18 are pending in the application. Claims 5, 11, and 17 are cancelled. Claims 1, 7, and 13 are the independent claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4, 6-8, 10, 12-14, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier et al. (5625815), and further in view of Amit et al. (5659701).

As per claims 1, 7 and 13, Maier et al. teach

a method for executing a query against a database to retrieve desired data from a database table – col. 3, line 54 to col. 4, line 6.

wherein the database includes a plurality of networked partitions for storing different portions of said database table based on a partitioning schema – col. 2, lines 24-33; col. 3, line 38 to col. 4, line 6.

each partition contained within a corresponding network processing node and associated with a partition identifier – col. 2, lines 29-32; col. 19, lines 13-20; col. 10, lines 47-59.

and database catalog information indicating data organization in said database – col. 3, line 54 to col. 4, line 6; col. 4, last paragraph.

(a) providing a client query for said database at a network processing node in accordance with a user request to retrieve said desired data – col. 2, lines 24-33.

and retrieving information within said database catalog information associated with said database table containing said desired data and relating to the partitioning schema – col. 4, last par; col. 6, lines 9-18.

(b) analyzing the contents of the client query; and the retrieved database catalog information to determine a specific partition from among said plurality of networked partitions containing the database table portion with the desired data satisfying said client query; and identifying a partition identifier associated with the specific partition - col. 3, line 54 to col. 4, line 6 (because each partition storing records having primary key values in a primary key range distinct from other partition, thus based on the database index, queries to database tables should be associated to the appropriate key ranges of records or partition).

However, Maier et al. do not disclose agent module. Amit et al. teach (c) executing the client query against said specific partition by determining said associated agent module for said specific partition based on said partition identifier – col. 8, last

paragraph; col. 10, lines 1-67 (the agent ...sends the message to the target partition/directing said agent to execute said client query to retrieve said desired data against said specific partition);

wherein a plurality of agent modules of at least one of said network processing nodes are each associated with a corresponding networked partition to establish a physical connection with, execute said query against and retrieve said desired data from that networked partition – fig. 4, partition I with agent I, partition II with agent II, connected by the communication network: col. 13, lines 20-30; fig.9, items 801-821, partitions. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Maier et al.'s teaching with Amit's teaching in order to allow efficient storage and retrieval of data.

As per claims 2, 8, and 14, Maier et al. teach

(a. 1) storing the retrieved database catalog information in a database catalog cache – fig. 1, items 112, 124-126; col. 3, last par. to col. 4, line 28.

As per claims 4, 10, and 16, Maier et al. teach

resolving the partition identifier – col. 2, lines 23-33; col. 7, last par. to col. 8, line 5; col. 10, lines 45-67.

As per claims 6, 12, and 18, Maier et al. teach col. 3, line 54 to col. 4, line 27 (...for programs used to access the database tables...thus, inherently, results will be returned to the users' programs' requests).

Claims 3, 9, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier et al. (5625815), in view of Amit et al. (5659701), and further in view of Weinberg et al. (US 20030233347).

As per claims 3, 9, and 15, Maier et al. teach the database catalog in the catalog cache - fig. 1, items 124-126 and 116-1. However, Maier and Amit do not teach building a subset of the database catalog. Weinberg et al. teach storing and retrieving data in database systems – par. 0046; search the sub-set of catalog data using a first lookup in the sub-tables – par. 0019. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Maier et al.'s teaching with Amit et al.'s and Weinberg's teachings in order to allow searches/queries to quickly retrieve information from the appropriate partitions.

### ***Response to Arguments***

Applicant's arguments with respect to claims above have been considered but are moot in view of the new ground(s) of rejection. Amit et al.'s teaching is hereby applied for the arguments against the newly added limitations in the amended claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINH BLACK whose telephone number is 571-272-4106. The examiner can normally be reached on Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LINH BLACK  
Examiner  
Art Unit 2163

March 20, 2008  
/don wong/  
Supervisory Patent Examiner, Art Unit 2163